

Companies $C_1, C_2 \dots C_T$

Financial Data Categories
D₁, D₂
... D₃₀

	C_1	C_2	C_3	• • •	C _T
D ₁ D ₂ D ₃	$X_{1,1} \ X_{2,1} \ X_{3,1}$	$X_{1,2} \ X_{2,2} \ X_{3,2}$	$X_{1,3} \ X_{2,3} \ X_{3,3}$		X _{1,T} X _{2,T} X _{3,T}
		•			•
•	•	•			•
	•	•			•
1 .					
ļ.					
D ₃₀	X _{30,1}				Х _{30,Т}

X Matrix 100 (valuation data)

Companies $C_1,\,C_2\,\dots\,C_T$

Time Indices t to t-2500

	C ₁	C ₂	C_3	 Ст	200
t t-1 t-2		$Y_{t,2} \\ Y_{t-1,2} \\ Y_{t-2,2}$	$Y_{t-1,3}$	 $egin{array}{l} Y_{t,T} \ Y_{t-1,T} \ Y_{t-2,T} \end{array}$	
	•		•		
· .	•	•	•		}
·	•	•	•		
t-250	0.				J

Y Matrix 200 (time-series data)

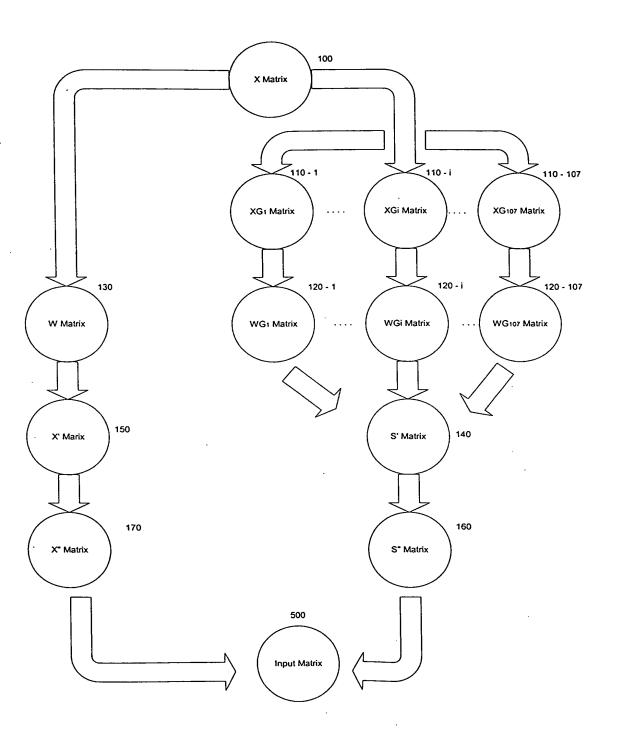


FIG. 4

1	-2	1	0	0		0
-2	5	-4	1	0		0
1	-4	6	-4	1		0
Ιo	1	-4	6	-4		0
0	0	1	-4	6	•••	0
			-			•
		•			-	
		•	•	•	•	•
0		6	-4	1	0	0
0		-4	6	-4	1	0
0		1	-4	6	-4	1
0		0	1	-4	5	-2
0	•••	0	0	1	-2	1
I						

A Matrix 610

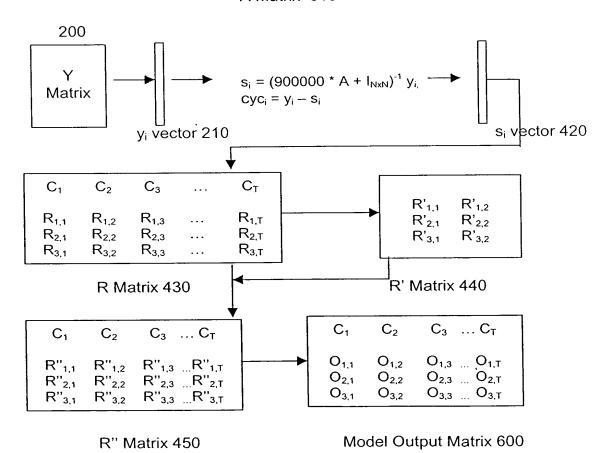


FIG. 5

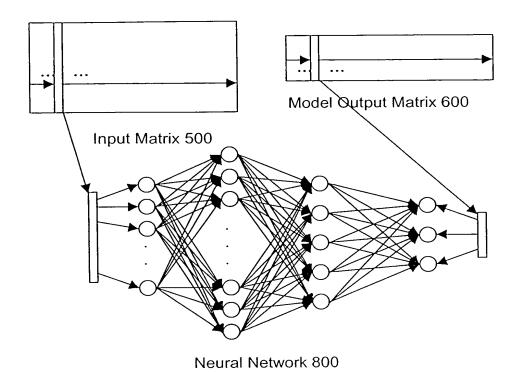


FIG. 6